

## ASTM A 193 Gr.B8PA

# STAINLESS STEEL

### CLASS 1A

BOLTING MATERIAL FOR LOW TEMPERATURE SERVICE

ASTM A 193 Gr.B8PA Class 1A covers alloy and stainless steel bolting material for pressure vessels, valves, flanges, and fittings for high-temperature service. The term bolting material as used in this specification covers bars, bolts, screws, studs, stud bolts, and wire. Bars and wire shall be hot-wrought. The material may be further processed by centerless grinding or by cold drawing. Austenitic stainless steel may be carbide solution treated or carbide solution treated and strain-hardened.

#### Chemical Properties

C	Si	Mn	P	S	Cr	Ni
0.08 Max	1.00 Max	2.00 Max	0.045 Max	0.030 Max	18.0-20.0	8.0-11.0

#### Mechanical Properties

Yeild strength	Tensile strength	Elongation	Reduction	Hardness
Min 0.2% Mpa	Min Mpa	Min %	Min %	HRB Max
205	515	30	50	90

#### Heat Treatment

Carbide Solution Treated In The Finished Condition.

#### Equivalent Designation

UNS S30500  
Din X5CrNi 18 12  
Werkstoff.No. 1.4303  
JIS SUS 305  
AFNOR Z10 CN 18.9M

CUSTOMER ASSISTANCE : [customer@TorqBolt.com](mailto:customer@TorqBolt.com)

#4/217, Deccan Bank Bldg,  
R. R. Roy Road, Mumbai – 400 004,  
Maharashtra, INDIA

Email: [info@TorqBolt.com](mailto:info@TorqBolt.com)

Web: [www.TorqBolt.com](http://www.TorqBolt.com)

Copyright 2013 Torqbolt Inc.